

NOV 08 2016



November 1, 2016

Environmental Protection Agency Region 5  
Air and Radiation Division  
Air Programs Branch (AR-18J)  
Air Permits Section  
77 West Jackson Boulevard  
Chicago, IL 60604

**Re: Request to Remove Annual NOx Testing Permit Requirements**  
**Permit Nos. PSD-ML-2711500031-2010-02 and V-ML-2711500031-2016-01**

To Whom It May Concern:

Grand Casino Hinckley (GCH), located in Hinckley, Pine County, Minnesota has recently undergone the renewal of their Part 71 Air Permit. While discussing potential comments on the draft permit with Paymon Danesh and Mike Langman in a phone call on September 21, 2016, GCH explained that the use of a portable electrochemical analyzer for measuring NOx is producing unreliable results. Mr. Langman suggested that USEPA would be open to considering a request from GCH to remove these testing requirements provided adequate justification could be made. Such a request is the subject of this submittal.

**Background to NOx Testing Permit Requirements**

On 11/10/2002, PSD permit PSD-ML-R50005-02-01 authorized the construction of three diesel-fired Caterpillar 3516B engines and three 1,825 kW generators.

- The permit imposed short-term NOx limits of 37.44 lb/hr and 6.55 g/bhp-hr for each engine.
- The permit imposed an initial performance test and periodic performance tests every three years for each engine to demonstrate compliance with these limits using Methods 7E and 17.
- The permit imposed annual testing using a portable emissions analyzer (during the calendar years in which a performance test is not required) for each engine to demonstrate compliance with these limits.
- The engines (EU001, EU002 and EU003) were installed on 12/4/2004.

On 12/30/2010, PSD permit PSD-ML-2711500031-2010-02 was issued that reduced the frequency of the periodic performance testing from once every three years to once every five years.

Also on 12/30/2010, Title V permit V-ML-2711500031-2010-01 was issued that authorized operation of the facility and incorporated the NOx emission limits and testing requirements from PSD permit PSD-ML-2711500031-2010-02.

GCH's Title V permit was renewed on 10/20/2016 as V-ML-2711500031-2016-01. The permit reverts the frequency of the periodic performance testing from once every five years back to once every three years. This makes the NOx performance testing on the same schedule as the newly applicable CO testing requirements that were imposed by 40 CFR 63, subpart ZZZZ, §63.6615.

#### **Historical NOx Testing Results**

Since the engines were first installed in 2004, there have been four performance tests and eight annual tests. These are documented in Table 1 and Figures 1 through 4, attached.

The data confirms the statement made in Section 6.d of the Statement of Basis for permit V-ML-2711500031-2016-01 that GCH's annual testing using the portable electrochemical analyzer has not been able to consistently demonstrate compliance with the g/bhp-hr NOx emission limits for EU001, EU002, and EU003 (see Figure 3). However, the annual testing has consistently demonstrated compliance with the lb/hr NOx limits.

Since the performance testing has always demonstrated compliance with both the lb/hr and the g/bhp-hr NOx limits, GCH requests that the annual testing requirement be removed from permit PSD-ML-2711500031-2010-02 (and subsequently permit V-ML-2711500031-2016-01) and that compliance be demonstrated solely via the more rigorous performance testing which, with the issuance of permit V-ML-2711500031-2016-01, is required once every three years.

Finally, as instructed by Paymon Danesh, please find attached Forms 5900-79 and 5900-02 in support of this submittal.

If you have any questions regarding this request, please contact me at (320) 384-4907, or [bkalk@grcasinos.com](mailto:bkalk@grcasinos.com). Paul Taylor at Barr Engineering Co. may also be contacted at (952) 832-2671 or [ptaylor@barr.com](mailto:ptaylor@barr.com).

Sincerely,



Brad Kalk

Vice President of Facilities

Grand Casino Hinckley

- Encl.    Table 1: NOx Stack Testing Results  
          Figure 1: NOx (lb/hr) - Annual Tests  
          Figure 2: NOx (lb/hr) - Performance Tests  
          Figure 3: NOx (g/bhp-hr) - Annual Tests  
          Figure 4: NOx (g/bhp-hr) - Performance Tests  
          EPA Form 5900-79: General Information and Summary (GIS)  
          EPA Form 5900-02: Certification of Truth, Accuracy, and Completeness (CTAC)
- c:        Paymon Danesh, USEPA Region V (via e-mail)  
          Mike Langman, USEPA Region V (via e-mail)  
          Paul Taylor, Barr Engineering Co. (via e-mail)

**Table 1: NOx Stack Testing Results**

Description	Test Date	NOx						
		Test Method	lb/hr			gm/hp.hr		
			EU001	EU002	EU003	EU001	EU002	EU003
Initial NOx Performance Test	6/1/2006	[1]	33.5	32.0	26.9	5.86	5.60	4.70
Annual NOx Test	5/29/2007	[1]	33.1	34.8	31.5	5.79	6.10	5.51
Annual NOx Test	7/17/2008 (retest)	[1]	30.5	30.5	17.7	5.67	5.89	5.19
Annual NOx Test	5/20/2009	[1]	31.7	33.27	31.88	5.81	6.11	5.81
NOx Performance Test	4/12-13/2010	7E	34.69	32.36	30.73	6.31	5.90	5.60
Annual NOx Test	4/27/2011	[1]	37.16	36.38	35.44	6.79	6.85	6.61
Annual NOx Test	4/25/2012	[1]	36.20	35.52	32.21	6.75	6.81	6.15
Annual NOx Test	4/16/2013	[1]	32.91	34.59	30.74	6.23	6.58	5.87
Annual NOx Test	5/21/2014	[1]	24.94	26.93	25.44	7.02	7.54	7.03
NOx Performance Test	7/13-14/2015	7E	26.92	23.38	22.8	5.48	5.06	4.85
NOx Performance Test	7/5-7/2016	7E	32.59	32.35	28.54	6.14	6.09	5.44
Permit Limit:			37.44	37.44	37.44	6.55	6.55	6.55

**Notes:**

[1] ICAC Test Method for Periodic Monitoring using a portable electrochemical analyzer.

Green shading indicates that the test result complies with the permit limit.

Yellow shading indicates that the test result exceeds the permit limit.

Figure 1: NOx (lb/hr) - Annual Tests

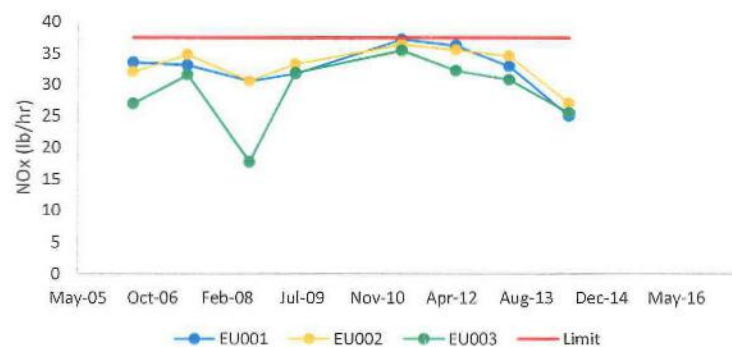


Figure 2: NOx (lb/hr) - Performance Tests

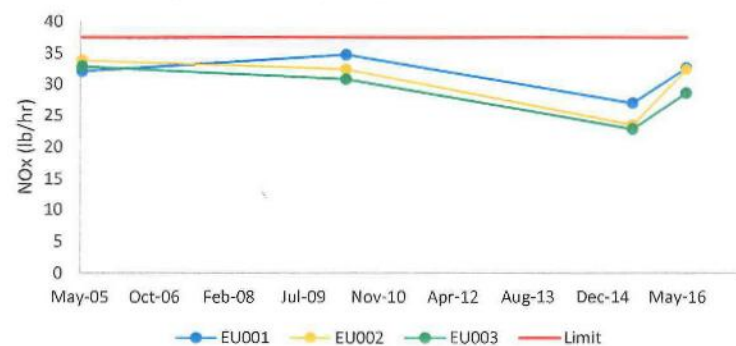


Figure 3: NOx (g/bhp-hr) - Annual Tests

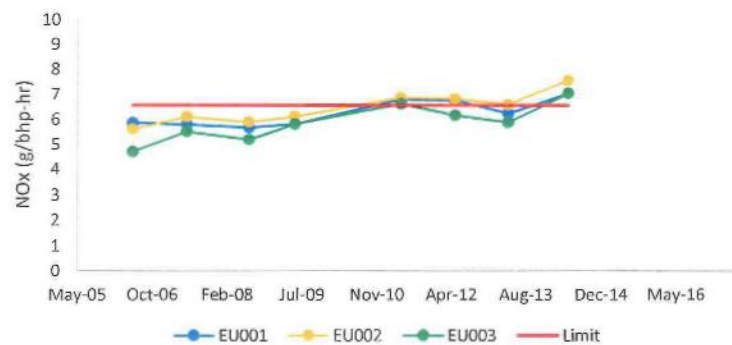
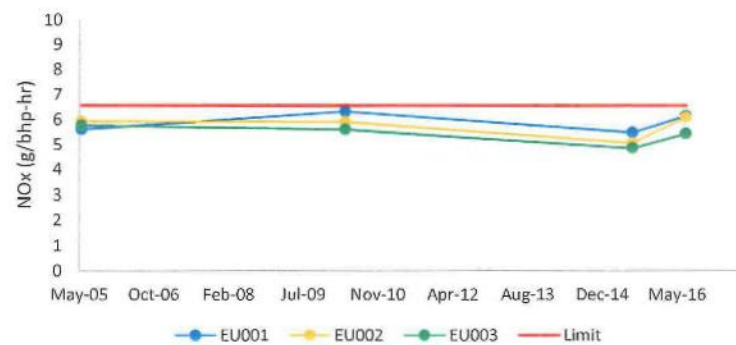


Figure 4: NOx (g/bhp-hr) - Performance Tests



Federal Operating Permit Program (40 CFR Part 71)  
**GENERAL INFORMATION AND SUMMARY (GIS)**

**A. Mailing Address and Contact Information**

Facility name Grand Casino Hinckley  
Mailing address: Street or P.O. Box 777 Lady Luck Drive  
City Hinckley State MN ZIP 55037 -  
Contact person: Bradley Kalk Title Vice President of Facilities  
Telephone ( 320 ) 384 - 4907 Ext. \_\_\_\_\_  
Facsimile ( 320 ) 384 - 4857

**B. Facility Location**

Temporary source? \_\_\_ Yes X No Plant site location \_\_\_\_\_  
City Hinckley State MN County Pine EPA Region 5  
Is the facility located within:  
Indian lands? X YES \_\_\_ NO An offshore source in federal waters? \_\_\_ YES X NO  
Non-attainment area? \_\_\_ YES X NO If yes, for what air pollutants? \_\_\_\_\_  
Within 50 miles of affected State? X YES \_\_\_ NO If yes, What State(s)? WI

**C. Owner**

Mille Lacs Corporate Ventures  
Name dba/Grand Casino Hinckley Street/P.O. Box 777 Lady Luck Drive  
City Hinckley State MN ZIP 55037 -  
Telephone ( 320 ) 523 - 8882 Ext \_\_\_\_\_

**D. Operator**

Name Same as owner Street/P.O. Box \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_ -  
Telephone ( \_\_\_\_\_ ) \_\_\_\_\_ - \_\_\_\_\_ Ext \_\_\_\_\_

**E. Application Type**

Mark only one permit application type and answer the supplementary question appropriate for the type marked.

☐ Initial Permit    ☐ Renewal    ☐ Significant Mod    ☒ Minor Permit Mod(MPM)

☐ Group Processing, MPM    ☐ Administrative Amendment

For initial permits, when did operations commence? \_\_\_\_/\_\_\_\_/\_\_\_\_

For permit renewal, what is the expiration date of current permit? \_\_\_\_/\_\_\_\_/\_\_\_\_

**F. Applicable Requirement Summary**

Mark the types of applicable requirements that apply:

☐ SIP    ☐ FIP/TIP    ☐ PSD    ☐ Non-attainment NSR

☒ Minor source NSR    ☐ Section 111    ☐ Phase I acid rain    ☐ Phase II acid rain

☐ Stratospheric ozone    ☐ OCS regulations    ☒ NESHAP    ☐ Sec. 112(d) MACT

☐ Sec. 112(g) MACT    ☐ Early reduction of HAP    ☐ Sec 112(j) MACT    ☐ RMP [Sec.112(r)]

☐ Section 129    ☐ NAAQS, increments or visibility but for temporary sources (This is rare)

Is the source subject to the Deepwater Port Act? ☐ YES ☒ NO

Has a risk management plan been registered? ☐ YES ☒ NO    Agency \_\_\_\_\_

Phase II acid rain application submitted? ☐ YES ☒ NO    If YES, Permitting Authority \_\_\_\_\_

**G. Source-Wide PTE Restrictions and Generic Applicable Requirements**

Cite and describe any emissions-limiting requirements and/or facility-wide "generic" applicable requirements.


**H. Process Description**

List processes, products, and SIC codes for the facility.

Process	Products	SIC
Hotels and Motels		7011
Electricity generation		4911

**I. Emission Unit Identification**

Assign an emissions unit ID and describe each emissions unit at the facility. Control equipment and/or alternative operating scenarios associated with emissions units should be listed on a separate line. Applicants may exclude from this list any insignificant emissions units or activities.

Emissions Unit ID	Description of Unit
001	Non-emergency Peaking Generator Set
002	Non-emergency Peaking Generator Set
003	Non-emergency Peaking Generator Set
004	Emergency Generator
005	Emergency Generator

**J. Facility Emissions Summary**

Enter potential to emit (PTE) for the facility as a whole for each regulated air pollutant listed below. Enter the name of the single HAP emitted in the greatest amount and its PTE. For all pollutants, stipulations to major source status may be indicated by entering "major" in the space for PTE. Indicate the total actual emissions for fee purposes for the facility in the space provided. Applications for permit modifications need not include actual emissions information.

NOx 68.2 tons/yr    VOC 1.9 tons/yr    SO2 0.3 tons/yr  
PM-10 1.2 tons/yr    CO 5.8 tons/yr    Lead 0.0 tons/yr  
Total HAP 0.1 tons/yr  
Single HAP with greatest amount Benzene    PTE 0.02 tons/yr  
Total of regulated pollutants (for fee calculation), Sec. F, line 5 of form FEE 12 [1] tons/yr

**K. Existing Federally-Enforceable Permits**

Permit number(s) PSD-ML-271150031-2010-02    Permit type Construction    Permitting authority EPA Region 5  
Permit number(s) V-ML-2711500031-2016-01    Permit type Operation    Permitting authority EPA Region 5

**L. Emission Unit(s) Covered by General Permits**

Emission unit(s) subject to general permit None  
Check one:    ☐ Application made    ☐ Coverage granted  
General permit identifier \_\_\_\_\_    Expiration Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**M. Cross-referenced Information**

Does this application cross-reference information?    ☐ YES    ☒ NO    (If yes, see instructions)

*INSTRUCTIONS FOLLOW*

[1] For calendar year 2014 emissions.

**Federal Operating Permit Program (40 CFR Part 71)  
CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS (CTAC)**

This form must be completed, signed by the "Responsible Official" designated for the facility or emission unit, and sent with each submission of documents (i.e., application forms, updates to applications, reports, or any information required by a part 71 permit).

**A. Responsible Official**

Name: (Last) Kalk (First) Bradley (MI) \_\_\_\_\_

Title Vice President of Facilities

Street or P.O. Box 777 Lady Luck Drive

City Hinckley State MN ZIP 55037 - \_\_\_\_\_

Telephone ( 320 ) 384 - 4907 Ext. \_\_\_\_\_ Facsimile ( 320 ) 384 - 4857

**B. Certification of Truth, Accuracy and Completeness** (to be signed by the responsible official)

I certify under penalty of law, based on information and belief formed after reasonable inquiry, the statements and information contained in these documents are true, accurate and complete.

Name (signed) 

Name (typed) Bradley Kalk Date: 11/02/16